



Illinois Department of Transportation

Memorandum

To: DEPUTY SECRETARIES, DIRECTORS AND BUREAU CHIEFS
From: Becky Koehler
Bureau Chief of Personnel Management
Subject: Technical Vacancy
Date: January 18, 2018

Attached are the Position Summary Sheet and Position Description for the vacant technical position listed below. Please post this vacancy announcement January 19, 2018 in the designated areas.

The deadline for applicants to submit their applications for consideration is **4:30 p.m. on Thursday, February 8, 2018**. Applications will not be accepted after that time and date.

If you have any questions, please contact the Bureau of Personnel Management at 217/782-5594.

CE VIII

Engineer of Design & Environment
Bureau of Design & Environment
Office of Program Development
Springfield
RUTAN EXEMPT POSITION

Attachments
42608

A cover letter, resume and Technical Applications [PM1080 rev 6/1/17](#) ****must be received** by the Bureau of Personnel Management, Room 113, 2300 South Dirksen Parkway, Springfield, IL 62764 (Fax# 217/557-3134) or emailed to DOT.CO.BPM.EmploymentApplications@Illinois.gov by **Thursday, February 8, 2018, 4:30 p.m.** Please include address, daytime phone and position for which applying if not already listed on application. Applicants will be notified in writing to schedule interviews.



Illinois Department of Transportation

An Equal Opportunity Employer

Position Summary Sheet

Classification:	Civil Engineer VIII - RUTAN EXEMPT POSITION	Salary:	\$7,955 - \$9,710*
Position Title:	Engineer of Design and Environment	Union Position:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Position Number:	PW118-23-65-300-00-01	IPR#:	42608

Office/Central Bureau/District/Work Address:

Office of Program Development/Bureau of Design & Environment/2300 S. Dirksen Parkway, Springfield, IL

Description of Duties:

This position is accountable for managing the Bureau of Design and Environment (BDE) which is responsible for developing statewide standards, specifications and policies for the design of a transportation network which provides for economical, smooth, safe, rapid and comfortable movement of people and goods within and through the state. This position is responsible for planning, directing and coordinating the activities of the bureau to ensure compliance with federal and state law which include developing transportation related policies, procedures, and standards; providing support services for district project development programs; preparing federal-aid program documents; oversight of advertisements and awards for all construction and engineering contracts; and processing plans and contract documents through the letting stage. In addition, this position is responsible for managing activities related to developing policies for the preparation, coordination, final review and approval of project location studies and environmental studies; and providing technical expertise for solving unique engineering, social, economic and environmental problems.

Special Qualifications:

Required:

- Current Illinois Professional Engineer license
- Valid driver's license
- Occasional statewide and out-of-state travel which may require overnight stays

Desired:

- Twelve years of experience in civil engineering including eight years of administrative responsibility for planning and directing difficult engineering work
 - Comprehensive knowledge of the principles and practices of civil engineering with a specialized knowledge in highway engineering improvements
 - Comprehensive knowledge of the modern methods and practices of public works construction and maintenance operations
 - Ability to interpret and develop policy within the areas of assigned programs
 - Comprehensive knowledge of the laws controlling the activities administered
 - Ability to initiate, coordinate and direct large scale engineering programs or research and planning activities of diverse technical nature
 - Ability to promote, establish, and maintain harmonious relationships between and among diverse groups of professional and technical personnel and the general public
 - Excellent oral and/or written communication skills
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Shift/Remarks:

8:00 am - 4:30 pm / Monday - Friday

THIS POSITION IS COVERED UNDER THE REVOLVING DOOR PROHIBITION (RDP) POLICY.

*Individual salary offers are computed based on an applicant's current position and experience level in comparison to the posted title as well as internal equity of staff in the organizational unit.

**Technical Application PM1080 (revised 6/1/17) is required. No previous version of the PM1080 will be accepted.

ILLINOIS DEPARTMENT OF TRANSPORTATION POSITION DESCRIPTION

DATE:	November 9, 2017	POSITION:	Engineer of Design and Environment
APPROVED BY:	Priscilla Tobias	OFFICE:	Program Development/ Bureau of Design and Environment
CODE:	PW118-23-65-300-00-01	REPORTS TO:	Director of Program Development

Position Purpose

This position is accountable for managing the Bureau of Design and Environment (BDE) which is responsible for developing statewide standards, specifications and policies for the design of a transportation network which provides for economical, smooth, safe, rapid and comfortable movement of people and goods within and through the state. This position is responsible for planning, directing, and coordinating the activities of the bureau to ensure compliance with federal and state laws which include developing transportation related policies, procedures, and standards; providing support services for district project development programs; preparing federal-aid program documents; oversight of advertisements and awards for all construction and engineering contracts, and processing plans and contract documents through the letting stage. In addition, this position is responsible for managing activities related to developing policies for the preparation, coordination, final review and approval of project location studies and environmental studies, and providing technical expertise for solving unique engineering, social, economic and environmental problems.

Dimensions

Personnel:

- Direct Seven
- Bureau Staff +/- 120

Value of Consultant Contracts: \$15M-\$50M

Value of Highway Construction Contracts +/- \$2.0B

Nature and Scope

This position reports to the Director of Program Development. Reporting to this position are the Section Chiefs of Surveys, Mapping, and Modeling; Location and Environment; Policy and Procedures; Project Coordination and Implementation; Preliminary Engineering; and System and Services; and an Executive Secretary.

This BDE develops and issues statewide policies for the Illinois Department of Transportation (IDOT) for surveying, mapping, modeling, location, design, and environmental studies. It develops statewide transportation standards and specifications. The bureau monitors project implementation activities in the districts to assure uniformity of policy interpretation and compliance. It approves for the IDOT the engineering and environmental studies needed to define transportation projects and secures federal approval with FHWA. The bureau provides: 1) a centralized source of highly specialized technical expertise, which cannot be maintained in each district office; 2) surveying, mapping, and modeling services for the Department, as well as other governmental agencies; and 3) support services in all matters pertaining to bureau operations. The BDE conducts departmental lettings, advertises and coordinates selection for engineering services, and secures obligation of federal funds. This position is accountable for the direction and coordination of bureau activities through the determination of operational policies, definition of work responsibilities, formulation of an operating budget, and the training and assignment of bureau staff.

One of greatest challenges involves utilizing initiative to apply innovative solutions to unique problems. Typical problems involve coordinating sound engineering principles and environmental expertise to cause timely development of safe, cost-effective transportation improvements.

The incumbent personally sets goals for the bureau and plans, organizes, directs, and controls its operations to assure goals are achieved in an efficient and effective manner. This involves developing, maintaining, and disseminating environmental and engineering policy. The incumbent approves pavement management and design; conducts transportation lettings; administers architectural/engineering consultant prequalification and contract management; approves some location and environmental studies and interstate access studies; and coordinates some approvals of federally-funded projects with the FHWA. The incumbent certifies engineering approval of agreements, condemnation plans, and petitions to the Illinois Commerce Commission. This position conducts meetings with appropriate bureaus to analyze letting bids and recommends contract awards to the Director. The bureau chief is expected to exercise significant discretion for the regular and daily implementation of policy and strategy as directed by executive staff.

Accountabilities are accomplished through the following staff:

Section Chief of Surveys, Mapping, and Modeling who is accountable for developing and implementing statewide policies and procedures for surveying, mapping, and modeling for transportation projects; data and image acquisition and processing, control data for image orientation, data compilation and presentation of an end product such as topographic maps, orthophotos, or digital elevation or digital terrain models, coordinating remote sensing for aerial photography, LIDAR, and conventional surveying; developing and implementing 3D CADD modeling and GIS layers for statewide use in transportation projects; determining best methods for data acquisition for mapping development; developing and maintaining manuals and provides associated Program Development training; administering consultant mapping and modeling contracts and agreements; and publishing and maintaining the Survey Manual and the CADD Manual.

Section Chief of Location and Environment who is accountable for providing departmental expertise in the disciplines of socio-economics, agriculture, natural resources, air quality, and noise, and ensuring compliance with related federal regulations and state laws; preparing and/or reviewing all, or portions of, project-related environmental documents and attending district coordination meetings to participate in project decisions and to guide project development; providing departmental training in environmental matters and assisting in the development or management of environmental documents as requested; establishing environmental consultant prequalification criteria and determining eligibility of firms requesting prequalification in environmental categories; reviewing consultant advertisements, proposals, selection, and negotiations for projects involving complex environmental documents; providing liaison with internal and external governmental entities on issues and procedural matters relating to the environmental process; operating and managing environmental resource surveys to identify impacts on biological and wetland resources, prehistoric and historic archaeological properties, and geologic and special waste sites; and preparing location studies for certain complex, critical, or environmentally sensitive projects.

Section Chief of Policy and Procedures who is accountable for: publishing and maintaining the Bureau of Design & Environment Manual which contains the engineering policies and procedures which govern the design of highways, intersections, interchanges, and bicycle/pedestrian facilities; preparing location and environmental studies prepared by the district offices; monitoring and evaluating legislation, regulations and national guidelines affecting environmental and engineering policies; publishing and maintaining the Highway Standard Drawings, the Standard Specifications for Road and Bridge Construction, the Supplemental Specifications and Recurring Special Provisions, and the BDE Special Provisions which are used in construction contracts; and maintaining and

coordinating the Department's Americans with Disabilities Act Transition Plan for the services and facilities provided in the public right-of-way.

Section Chief of Project Coordination and Implementation who is accountable for approving all state-, departmentally-, and federally-funded projects under the Certification Acceptance or the Surface Transportation Program exemption process; recommending acceptance of, or changes to, the Department's annual multi-year highway programs; determining the official state estimate for all projects offered for letting by the Office of Program Development; analyzing bids received on lettings and making disposition recommendations to the awards committee; reviewing and processing plans, proposals and legal contract documents through the letting stage; determining the letting composition; obtaining authorization from the FHWA for all federally-funded projects including the advertising of projects; and conducting of lettings and execution of contracts.

Section Chief of Preliminary Engineering who is accountable for the prequalification of architectural/engineering consultant firms who desire to do business with the Department; working with districts/offices in compiling and publishing advertisements for the Professional Transportation Bulletin soliciting services for the Department's engineering/architectural needs; evaluating and preparing data for the selection of consultant firms; developing policies and procedures for administration of consultant, utility, railroad and local agency contract agreements; preparing and securing contract agreements with architectural/engineering consultants, railroad companies, utilities, local agencies, and other state agencies; developing and disseminating statewide design criteria practices and policies for Electrical, Lighting and Pump Station (EL&P) projects; designing and preparing all in-house plans for EL&P projects; and reviewing all EL&P plans and documents for projects designed by consultants except for District One.

Section Chief of System and Services who is accountable for the overall administration and coordination of BDE's daily office and file room processes; coordination of statewide engineering line items development; maintenance of the annual operating budget; coordination of audit activities and responses; processing of invoices for payment; tracking of bureau expenditures; financial and contract management; developing and implementing effective processes for administration and communication to ensure maximum utilization of all resources to accomplish bureau objectives; serving as liaison between the Bureau of Personnel, Bureau of Labor Relations, and the BDE which includes payroll management, drafting and clarifying job descriptions, creating posting packages and questions and criteria; and coordinating labor and progressive discipline.

Internal contacts include Office of Program Development personnel including the director and central office bureau chiefs; Office of Project Implementation personnel including associated bureau chiefs and all regional engineers; the Office of Communications; Bureau Chiefs of Programming and Planning; and other offices of the Department. External contacts include regular contact with the FHWA; other federal, state, and local agencies; transportation agencies from other states; and consultant engineers, industry representatives, contractors, suppliers, and the general public. The incumbent may be appointed to various committees by the director, secretary, or governor. These assignments may include, but are not limited to, the Governor's Inter-agency Committee on Farmland Preservation, various AASHTO committees/subcommittees/task groups, IAPA/IDOT Task Force, Joint Coop Committee, Railroad Task Force Committee, Quality Assurance Committee, and Illinois Highway Research Council. Occasional statewide and out-of-state travel, which may require overnight stays, is required.

This position has wide latitude to accomplish responsibilities. Only matters of a highly sensitive nature are referred to the immediate supervisor for resolution. S/He is constrained by departmental regulations, policies and procedures as well as applicable federal/state laws.

The effectiveness of this position is measured by the timely advertisement and award/selection of projects, the completion of the Department's annual highway program, and the quality and acceptance of design policy and standards.

Principal Accountabilities

1. Develops and maintains policies for location and environmental studies and public involvement, to assure safe, cost-effective, and environmentally sound highway improvements that meet the needs of the state.
2. Monitors and approves environmental and engineering studies to assure policies are applied in an acceptable and uniform manner in the districts.
3. Coordinates project development, with the public and other agencies, to ensure public input, a multi-disciplinary approach, and timely completion of the project studies phases.
4. Provides a high level of specialized technical services, in the engineering and environmental areas, not available in district project implementation staffs or modal divisions.
5. Advertises and awards contracts for construction and engineering services.
6. Administers university contracts for environmental surveys and programs.
7. Provides data and image acquisition and processing, control data for image orientation, data compilation and presentation of an end product such as topographic maps, orthophotos, or digital elevation or digital terrain models; and coordinates remote sensing for aerial photography, LIDAR, and conventional surveying.
8. Develops and provides for statewide policies and procedures related to mapping and modeling.
9. Provides bureau representation on national, state, interagency, departmental, and Office of Program Development policy setting organizations.
10. Develops and administers appropriate design policy, standards, and specifications that are safe and cost-effective.
11. Provides services to the districts in support of the roadway design program.
12. Provides departmental services for the prequalification, preselection, and preparation of agreements with architectural/engineering consultant firms.
13. Finalizes contract plans and documents and coordinates project approvals with other agencies for the letting and awards of contracts.
14. Develops and implements operating policies and procedures for the bureau to ensure the most efficient and effective operation.
15. Directs activities of the internet as a communication tool for the publication of the Transportation Bulletin.
16. Selects, trains, and motivates a competent staff that is capable of carrying out the programs of the bureau in an efficient and effective manner.
17. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
18. Performs other duties as required or assigned.